## SEQUENCE LISTING

- (1) GENERAL INFORMATION
- (i) APPLICANT: BILLING-MEDEL, PATRICIA
  COHEN, MAURICE
  COLPITTS, TRACEY L.
  FRIEDMAN, PAULA N.
  GORDON, JULIAN
  GRANADOS, EDWARD N.
  HODGES, STEVEN C.
  KLASS, MICHAEL R.
  KRATOCHVIL, JON D.
  ROBERTS-RAPP, LISA
  RUSSELL, JOHN C.
  STROUPE, STEPHEN D.
  YU, HONG
- (ii) TITLE OF THE INVENTION: REAGENTS AND METHODS USEFUL FOR DETECTING DISEASES OF THE URINARY TRACT
- (iii) NUMBER OF SEQUENCES: 22
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Abbott Laboratories
  - (B) STREET: 100 Abbott Park Road
  - (C) CITY: Abbott Park
  - (D) STATE: IL
  - (E) COUNTRY: USA
  - (F) ZIP: 60064-3500
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: Diskette
  - (B) COMPUTER: IBM Compatible
  - (C) OPERATING SYSTEM: DOS
  - (D) SOFTWARE: FastSEQ for Windows Version 2.0
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER:
  - (B) FILING DATE:
  - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: 08/869,579
  - (B) FILING DATE: 05-JUN-1997
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Becker, Cheryl L.
  - (B) REGISTRATION NUMBER: 35,441
  - (C) REFERENCE/DOCKET NUMBER: 6107.US.Pl
- (ix) TELECOMMUNICATION INFORMATION:
  - (A) TELEPHONE: 847/935-1729
  - (B) TELEFAX: 847/938-2623
  - (C) TELEX:

(2) INFORMATION FOR SEQ ID NO:1:

<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 196 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:	
CTCCACTGCA ACCACCCAGA GCCATGGCTC CCCGAGGCTG CATCGTAGCT GTCTTTGCCA TTTTCTGCAT CTCCAGGCTC CTCTGCTCAC ACGGAGCCCC AGTGGCCCCC ATGACTCCTT ACCTGATGCT GTGCCAGCCA CACAAGAGAT GTGGGGACAA GTTCTACGAC CCCCTGCAGC ACTGTTGCTA TGATGA	60 120 180 196
(2) INFORMATION FOR SEQ ID NO:2:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 236 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:	
TTCTACGACC CCCTGCAGCA CTGTTGCTAT GATGATGCCG TCGTGCCCTT GGCCAGGACC CAGACGTGTG GAAACTGCAC CTTCAGAGTC TGCTTTGAGC AGTGCTGCCC CTGGACCTTC ATGGTGAAGC TGATAAACCA GAACTGCGAC TCAGCCCGGA CCTCGGATGA CAGGCTTTGT CGCAGTGTCA GCTAATGGAA CATCAGGGGA ACGATGACTC CTGGATTCTC	60 120 180 236
(2) INFORMATION FOR SEQ ID NO:3:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 417 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:	
ATAAAGTACA TAAATTTATT ATGATCCTGT GCTTTGCTCC TGGATAGAAG AGAACTTGAG ATGATGAAA ATCTCACAGA AGGGTGAAGG GTTCCCCAGC CAGCCTTGGG GTGGTGCCGG GTTGATGTTG GCCATAGGGG TCATCAGGAG GGTTCAGAGGT CCCTGGGCCC CCATCAGCAC ACGCATCTCA TGCTGTCCAG AATTCTAGAA GGGGACCTGT GGGCCTCCTC AGGGCAGCGG CAGCGTGGGC CTCAGACAGG TCACAGAATG AAGTGGGCAG TTGAGTGTGT TTTCTCTGG CCCCCAAACA GCCACTCAGC ATCCCAGATC TCAGGTAACA CCAGCCTCTT TCTCCAGGCC CACCCAGGAA GGAGAATCCA GGAGTCATCG TTCCCCTGAT GTTCCATTAG CTGACAC	60 120 180 240 300 360 417
(2) INFORMATION FOR SEQ ID NO:4:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 763 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:	
CTCCACTGCA ACCACCCAGA GCCATGGCTC CCCGAGGCTG CATCGTAGCT GTCTTTGCCA TTTTCTGCAT CTCCAGGCTC CTCTGCTCAC ACGGAGCCCC AGTGGCCCCC ATGACTCCTT ACCTGATGCT GTGCCAGCCA CACAAGAGAT GTGGGGACAA GTTCTACGAC CCCCTGCAGC ACTGTTGCTA TGATGATGCC GTCGTGCCCT TGGCCAGGAC CCAGACGTGT GGAAACTGCA	60 120 180 240

CCTTCAGAGT CTGCTTTGAG CAGTGCTGCC CCTGGACCTT CATGGTGAAG CTGATAAACC AGAACTGCGA CTCAGCCCGG ACCTCGGATG ACAGGCTTTG TCGCAGTGTC AGCTAATGGA ACATCAGGGG AACGATGACT CCTGGATTCT CCTTCCTGGG TGGGCCTGGA GAAAGAGGCT GGTGTTACCT GAGATCTGGG ATGCTGAGTG GCTGTTTGGG GGCCAGAGAA ACACACACTC AACTGCCCAC TTCATTCTGT GACCTGTCT AGGCCCACCC TGCCGCTGCC CTGAGGAGGC CCACAGGTCC CCTTCTAGAA TTCTGGACAG CATGAGATGC GTGTGCTGAT GGGGGCCCAG GGACTCTGAA CCCTCCTGAT GACCCGTATG GCCAACATCA ACCCGGCACC ACCCCAAGGC TGGCTGGGA ACCCTTCACC CTTCTGTGAG ATTTTCCATC ATCTCAAGTT CTCTTCTATC CAGGAGCAAA GCACAGGATC ATAATAAATT TATGTACTTT ATA	300 360 420 480 540 600 660 720
(2) INFORMATION FOR SEQ ID NO:5:	763
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 763 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:	
CTCCACTGCA ACCACCCAGA GCCATGGCTC CCCGAGGCTG CATCGTAGCT GTCTTTGCCA TTTTCTGCAT CTCCAGGCTC CTCTGCTCAC ACGGAGCCCC AGTGGCCCC ATGACTCTT ACCTGATGCT GTGCCAGCCA CACAAGAGAT GTGGGGACAA ACTGTTGCTA TGATGATGCC GTCGTGCCCT TGGCCAGGAC CCTTCAGAGT CTGCTTTGAG CAGTGCTGCC CCTGGACCTT AGAACTGCGA CTCAGCCCG ACCTCGGATG ACAGGCTTTG ACATCAGGGG AACGATGACT CCTGGATTCT CCTTCCTGGG TGGCCAGGAC GGTGTTACCT GAGATCTGGG ATGCTGAGTG GCCAGAGAA ACACACACTC AACTGCCCAC TTCATTCTGT GACCTGTCTG AGGCCCACCC CCACAGGTCC CCTTCTAGAA TTCTGGACAG CATGAGATGC GGACTCTGAA CCCTCCTGAT GACCCSTATG GCCAACATCA ACCCGGCACC ACCCCAGGGC TGGCTGGGA ACCCTTCACC CTTCTGTGAG ATTTTCCATC ATCTCAAGT CTCTTCTATC CAGGAGCAAA GCACAGGATC ATAATAAATT TATGTACTTT ATA  (2) INFORMATION FOR SEQ ID NO:6:  (i) SEQUENCE CHARACTERISTICS:  (A) LENGTH: 68 base pairs (B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	60 120 180 240 300 420 420 540 600 720 763
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:	
AGCTCGGAAT TCCGAGCTTG GATCCTCTAG AGCGGCCGCC GACTAGTGAG CTCGTCGACC CGGGAATT	60 68
(2) INFORMATION FOR SEQ ID NO:7:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 68 base pairs</li> <li>(B) TYPE: nucleic acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:	
AATTAATTCC CGGGTCGACG AGCTCACTAG TCGGCGGCCG CTCTAGAGGA TCCAAGCTCG GAATTCCG	60 68
(2) INFORMATION FOR SEQ ID NO:8:	

(i) SEQUENCE CHARACTERISTICS:

(B) (C)	LENGTH: 24 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:8:	
AGCGGATAAC	AATTTCACAC AGGA	24
(2	) INFORMATION FOR SEQ ID NO:9:	
(A) (B) (C)	SEQUENCE CHARACTERISTICS:  LENGTH: 18 base pairs  TYPE: nucleic acid  STRANDEDNESS: single  TOPOLOGY: linear	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:9:	
TGTAAAACGA	CGGCCAGT	18
(2	) INFORMATION FOR SEQ ID NO:10:	
(A) (B) (C)	SEQUENCE CHARACTERISTICS:  LENGTH: 18 base pairs  TYPE: nucleic acid  STRANDEDNESS: single  TOPOLOGY: linear	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:10:	
TGGAAACTGC	ACCTTCAG	18
(2	2) INFORMATION FOR SEQ ID NO:11:	
(A) (B) (C) (D)	SEQUENCE CHARACTERISTICS: LENGTH: 20 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear  SEQUENCE DESCRIPTION: SEQ ID NO:11:	
CAAAGCAGAC		20
	2) INFORMATION FOR SEQ ID NO:12:	
(A) (B) (C)	SEQUENCE CHARACTERISTICS: LENGTH: 18 base pairs TYPE: nucleic acid STRANDEDNESS: single TOPOLOGY: linear	
(xi)	SEQUENCE DESCRIPTION: SEQ ID NO:12:	
ACGCATCTCA	TGCTGTCC	18
(2	2) INFORMATION FOR SEQ ID NO:13:	
	SEQUENCE CHARACTERISTICS: LENGTH: 22 base pairs	

 Arg Cys Gly Asp Lys Phe Tyr Asp Pro Leu Gln His Cys Cys Tyr Asp 50
 55
 60

 Asp Ala Val Val Pro Leu Ala Arg Thr Gln Thr Cys Gly Asn Cys Thr 70
 75
 80

 Phe Arg Val Cys Phe Glu Gln Cys Cys Pro Trp Thr Phe Met Val Lys 85
 90
 95

 Leu Ile Asn Gln Asn Cys Asp Ser Ala Arg Thr Ser Asp Asp Arg Leu 100
 105
 110

 Cys Arg Ser Val Ser 115
 115
 110

- (2) INFORMATION FOR SEQ ID NO:18:
- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 32 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: None
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

Pro Leu Gln Pro Pro Arg Ala Met Ala Pro Arg Gly Cys Ile Val Ala

1 5 10 15

Val Phe Ala Ile Phe Cys Ile Ser Arg Leu Leu Cys Ser His Gly Ala
20 25 30

- (2) INFORMATION FOR SEQ ID NO:19:
- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 30 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: None
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

Leu Cys Gln Pro His Lys Arg Cys Gly Asp Lys Phe Tyr Asp Pro Leu

1 5 10 15

Gln His Cys Cys Tyr Asp Asp Ala Val Val Pro Leu Ala Arg
20 25 30

- (2) INFORMATION FOR SEQ ID NO:20:
- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 31 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: None
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

Thr Gln Thr Cys Gly Asn Cys Thr Phe Arg Val Cys Phe Glu Gln Cys

1 5 10 15

Cys Pro Trp Thr Phe Met Val Lys Leu Ile Asn Gln Asn Cys Asp
20 25 30

- (2) INFORMATION FOR SEQ ID NO:21:
- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 8 amino acids

(B) TYPE: nucleic acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:	
AGGCTGCATC GTAGCTGTCT TT	22
(2) INFORMATION FOR SEQ ID NO:14:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 22 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:	
CGCATCTCAT GCTGTCCAGA AT	22
(2) INFORMATION FOR SEQ ID NO:15:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 23 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:	
CCCAGTCACG ACGTTGTAAA ACG	23
(2) INFORMATION FOR SEQ ID NO:16:	
<ul><li>(i) SEQUENCE CHARACTERISTICS:</li><li>(A) LENGTH: 26 base pairs</li><li>(B) TYPE: nucleic acid</li><li>(C) STRANDEDNESS: single</li><li>(D) TOPOLOGY: linear</li></ul>	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:	
GCGGCCGCCG CTGACACTGC GACAAA	26
(2) INFORMATION FOR SEQ ID NO:17:	
<ul> <li>(i) SEQUENCE CHARACTERISTICS:</li> <li>(A) LENGTH: 117 amino acids</li> <li>(B) TYPE: amino acid</li> <li>(C) STRANDEDNESS: single</li> <li>(D) TOPOLOGY: linear</li> </ul>	
(ii) MOLECULE TYPE: None	
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:	
Pro Leu Gln Pro Pro Arg Ala Met Ala Pro Arg Gly Cys Ile Val Ala	
1 5 10 15  Val Phe Ala Ile Phe Cys Ile Ser Arg Leu Leu Cys Ser His Gly Ala	
20 25 30 Pro Val Ala Pro Met Thr Pro Tyr Leu Met Leu Cys Gln Pro His Lys 40 45	

- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

Asp Tyr Lys Asp Asp Asp Lys

- (2) INFORMATION FOR SEQ ID NO:22:
- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 21 amino acids
  - (B) TYPE: amino acid
  - (C) STRANDEDNESS: single
    (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn Met His Thr Glu His His His His His His 20